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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MARIAM, DANIEL G

ART UNIT PAPER NUMBER

2621

DATE MAILED: 02/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/649,662

Applicant(s)

MORITA ET AL.

Examiner

DANIEL G MARIAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/639,741.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/28/03 &amp; 1/14/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 24 is objected to because of the following informalities: in claim 24, line 6, the limitation “screed” appears to be grammatically awkward. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 30-33 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe, et al. (4,905,097).

With regard to claim 30, Watanabe, et al discloses a sheet, i.e., document, image processing system for processing a plurality of types of sheets (See Figs. 12(1) – 12(2)), comprising: an image acquiring unit, i.e., camera, which acquires an image of a sheet (See for example, col. 6, lines 8-13); an image editing unit, i.e., work stations (WS) “1-1, 1-2, 7-1, 7-2” shown in Fig. 1, which creates a binary image and a multi-valued image based on the image obtained by said image acquiring unit (See for example, col. 6, lines 14-49); a sheet identifying unit (this feature is considered inherent because an identifying unit is required in order to identify the kinds of documents that are displayed on the displaying unit for subsequent processing) which identifies a type of the sheet using the binary image created at said image editing unit (See col. 6, lines 15-16); and a display unit which displays a part of an area of the

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image acquired at said image acquiring unit in a binary image and another part of said area of the image in a multi-valued image based on a result of identification by said sheet identifying unit (See for example, Figure 13).

With regard to claim 31, a sheet image processing system according to claim 30, further comprising an area separating unit which separates a binary image and a multi-valued image to be displayed on said display unit from the image acquired at said image acquiring unit. The integrated document shown in Figure 13 of Watanabe does show the binary image in an area that is separate from the multi-valued image data.

With regard to claim 32, a sheet image processing system according to claim 30, wherein said display unit determines a multi-valued image which is to be displayed on a screen based on a result of identification by said sheet identification unit (See for example, col. 6, lines 40-42).

With regard to claim 33, a sheet image processing system according to claim 30, wherein said display unit displays the binary image and the multi-valued image in an arrangement which is determined based on a result identification of the sheet type by said sheet identifying unit (See Figure 13).

With regard to claim 35, a sheet image processing system according to claim 30, wherein said image acquiring unit is included in an image reading apparatus, said image editing unit is included in a window terminal, and said sheet identifying unit and said display unit are included in a center apparatus (See Figure 1).

4. Claims 34 and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe, et al. (4,905,097) in view of Rigakos (6,038,351).

With regard to claim 34, Watanabe, et al. discloses all of the claimed subject matter as discussed above in paragraph 3, and incorporated herein by reference. While Watanabe displays several items that are generic (See Fig. 13), Watanabe does not expressly call for wherein the area displayed in a binary image includes a branch code and an account number and the area displayed in a multi-valued image includes a print of seal, i.e., logo such as company name or bank name. However, Rigakos (Figs 4-5) teaches these features.

Watanabe and Rigakos are combinable because they are from the same field of endeavor, i.e., document processing (See the abstract). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Watanabe with Rigakos. The motivation for doing so is to permit the displaying of a document, such as a check containing a bank location/code, account number and the name of the bank/company, and thereby identifying and displaying the document based on the information contained in the document (See Fig. 3). Therefore, it would have been obvious to combine Rigakos with Watanabe to obtain the invention as specified in claim 34.

With regard to claim 36, claims 30 and 34 encompass each of the limitation of this claim, and claim 36 is rejected the same as claims 30 and 34. Thus, arguments similar to those presented above for claims 30 and 34 are equally applicable to claim 36.

With regard to claim 37, a sheet image processing system according to claim 36, further comprising an item separating unit which separates an image of the branch code, an image of the item of the account number and an image of the print of the seal that are on the sheet, wherein the binary image and the are separated by said item separating unit (See Fig. 3 of Rigakos; and Fig. 13 of Watanabe).

With regard to claim 38, a sheet image processing system according to claim 36, further comprising: an image reading apparatus which reads characters written on a sheet, a window terminal including a computer, and a center connected via communications network, i.e., LAN, to said window terminal, wherein said image reading apparatus includes said image acquiring unit, said window terminal includes said image editing unit, and said center apparatus includes said display unit (See Fig. 1 of Watanabe).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe, et al. (4,905,097) in view of Niki (6,055,336).

With regard to claim 22, Watanabe, et al. (hereinafter "Watanabe") discloses a sheet, i.e., document, image processing system for processing a plurality of types of sheets (See Figure 12(1) and 12(2)), comprising: an image acquiring unit, i.e., camera, which acquires an image of sheet (See for example, col. 6, lines 8-13); an image editing unit, i.e., work stations (WS) "1-1, 1-2, 7-1, 7-2" shown in Fig. 1, which creates a binary image and a multi valued image based on the image obtained by said image acquiring unit (See for example, col. 6, lines 14-49); (a recognizing unit which character recognizes said binary image) created at said image editing unit (See items 1-1, 1-2, 7-1, 7-2, in Fig. 1); and a display unit which displays the multi-valued image created at said image editing unit (See for example, col. 3, lines 18-30; col. 5, lines 12-14; and

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col. 6, lines 40-43). Although Watanabe does not use the language a recognizing unit which character recognizes the binary image, it would have been obvious if not inherent that the editing unit (WS) taught in Watanabe would not be able to perform the editing such as cut-out, of the binary image data, and enlargement, reduction, rotation, movement, synthesis, etc. of the cut-out binary image data while displaying the editing content on a display device. Nonetheless, recognizing a character in a binary image is well known as evidenced by Niki (See for example, col. 4, line 66 through col. 5, line 2).

Watanabe and Niki are combinable because they are from the same field of endeavor, i.e., document processing (See the abstract). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Watanabe with Niki. The motivation for doing so is to provide a character recognizer, and to do so would at least enable the system of Watanabe to recognize character images in the binarized image data (items S304-S-305, in Fig. 3). Therefore, it would have been obvious to combine Niki with Watanabe to obtain the invention as specified in claim 22.

With regard to claim 23, a sheet image processing system according to claim 22, wherein said display unit displays the binary image and a result of recognition of said binary image in parallel with each other and the multi-valued image (See for example, col. 1, lines 56-60; and Fig. 13 of Watanabe).

With regard to claim 24, a sheet image processing system according to claim 22, further comprising a sheet identifying unit which identifies a type of the sheet using the binary image created at said image editing unit. Watanabe does process the documents based on what kind of

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document is being displayed on the display unit (See col. 6, lines 15-16). wherein said display unit determines a multi-valued image which is to be arranged on a screen based on an identification result of the type of the sheet by said sheet identifying unit (See for example, col. 6, lines 17-39 of Watanabe).

With regard to claim 25, a sheet image processing system according to claim 22, further comprising a sheet identifying unit which identifies a type of the sheet using the binary image created at said image editing unit, wherein said display unit arranges a multi-valued image on a screen based on an identification result of the type of the sheet by said sheet identifying unit (which reads on Figure 13 of Watanabe).

With regard to claim 26, a sheet image processing system according to claim 22, further comprising: a sheet identifying unit which identifies a type of the sheet using the binary image created at said image editing unit, and an area separating unit which separates an image of a specific area from the multi-valued image created at said image editing unit based on a result of identification at said sheet identifying unit, wherein said display unit displays the multi-valued image separated at said area separating unit. The integrated document shown in Figure 13 of Watanabe, does show the binary image in an area that is separate from the multi-valued image data.

With regard to claim 27, a sheet image processing system according to claim 22, further comprising: a sheet identifying unit which identifies a type of the sheet using the binary image created at said image editing unit; and a display item determining unit which determines an item (item 65) to be displayed in a binary image on said display unit and an item (item 64) to be displayed in a multi-valued image on said display unit based on a result of identification at said

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sheet identifying unit, wherein said display unit displays a multi-valued image in correspondence to the item determined at said display item deciding unit (col. 6, lines 40-59 of Watanabe).

7. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Niki as applied to claims 22-27 above, and further in view of Rigakos (6,038,351).

With regard to claim 28, Watanabe (as modified by Niki) discloses all of the claimed subject matter as discussed above in paragraph 6, and incorporated herein by reference. While Watanabe displays several items that are generic (See Fig. 13), Watanabe (as modified by Niki) does not expressly call for wherein said display item determining unit determines that an item of branch code and an item of account number on a sheet are items to be displayed in a binary image and also determines that a print of seal, i.e., logo such as company name or bank name) on the sheet is an item to be displayed in a multi-valued image. However, Rigakos (Figs. 4-5) teaches these features.

Watanabe (as modified by Niki) and Rigakos are combinable because they are from the same field of endeavor, i.e., document processing (See the abstract). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Watanabe (as modified Niki) with Rigakos. The motivation for doing so is to permit the displaying of a document, such as a check containing a bank location/code, account number and the name of the bank/company, and thereby identifying and displaying the document based on the information contained in the document (See Fig. 3). Therefore, it would have been obvious to combine Rigakos with Watanabe (as modified by Niki) to obtain the invention as specified in claim 28.

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With regard to claim 29, a sheet image processing system according to claim 22, wherein said image acquiring unit is included in an image reading apparatus, said image editing unit is included in a window terminal, and said recognizing unit and said display unit are included in a center apparatus (See Figure 1 of Watanabe).

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Numbers: 5128748, 5898157, 6347156, and 6466954.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G MARIAM whose telephone number is 703-305-4010. The examiner can normally be reached on M-F (7:00-4:30) FIRST FRIDAY OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LEO BOUDREAU can be reached on 703-305-4607. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**DANIEL MIRIAM**  
**PRIMARY EXAMINER**

January 24, 2005